



OFFICE OF SURVEILLANCE

Division of Environmental Health and Communicable Disease Prevention

Annual Reports by County- -2002 Events

Adair	Atchison	Audrain	Barry	Bates
Bollinger	Boone	Buchanan	Butler	Callaway
Cape Girardeau	Cass	Christian	Clay	Cole
Cooper	Crawford	Dade	Dallas	Daviess
Dent	Dunklin	Franklin	Greene	Harrison
Henry	Hickory	Holt	Howell	Iron
Jackson	Jasper	Jefferson	Johnson	Laclede
Lawrence	Lincoln	Linn	Livingston	Macon
Maries	Marion	Mississippi	New Madrid	Newton
Nodaway	Oregon	Osage	Ozark	Pemiscot
Perry	Pettis	Phelps	Pike	Platte
Polk	Pulaski	Putnam	Randolph	Ray
Reynolds	Saline	Scott	Shelby	St. Charles
St. Francois	St. Louis	St. Louis City	Ste. Genevieve	Stone
Sullivan	Taney	Vernon	Warren	Washington
Wayne	Webster	Statewide		

Hazardous Substance Releases Profile for Adair County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Adair County:	2	1	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.5	0.8
Type(s) of Substance(s) Released: Ammonia (2 events) Carbon Monoxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (2)	Vehicle/vessel rollover

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
General Public (9) Student (1)	Carbon monoxide poisoning Headache Respiratory irritation Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, admitted (3) Treated at hospital, not admitted (6) Treated on scene (1)
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A pickup truck towing two tanks of anhydrous ammonia was traveling on a state highway. Due to the width of the vehicle, the left rear tire was in the opposite lane. A vehicle traveling on the opposite lane veered to go around the truck and tanks, overcorrected, and hit one of the tanks. The tank separated from the truck and overturned, releasing an unknown amount of ammonia. The driver of the second vehicle received injuries as a result of the accident and was transported to a hospital.

A faulty heater in an apartment building resulted in the release of carbon monoxide. There were no carbon monoxide detectors present in the building. Six residents of the building and two visitors were treated at a hospital for carbon monoxide poisoning; three were admitted.

Updated 12/03/03

Hazardous Substance Releases Profile for Atchison County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Atchison County:	1	1	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.5	0.5
Type(s) of Substance(s) Released: Chlorine Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Unknown (1)	Tire blew out (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Burns-Chemical related
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: The driver of a tractor trailer swerved to miss an oncoming vehicle, and hit an object in the road which caused a tire to blow out. Pallets of batteries in the truck shifted and the batteries touched, causing a reaction. The driver noticed odors coming from the back of the truck after pulling into a weigh station. The contents of the trailer were on fire; an unknown amount of sulfuric acid was released from the batteries.

Updated 12/03/03

Hazardous Substance Releases Profile for Audrain County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Audrain County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A valve stuck open on a process vessel at a wire fabrication facility, causing 600 gallons of sulfuric acid to be released. The company's response team and the local fire department responded to control and contain the release.

Updated 12/03/03

Hazardous Substance Releases Profile for Barry County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Barry County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Paint Sodium Hydroxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (1)	Improper loading (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: While in transit, a 50 gallon drum of paint fell off of the pallet. The edge of the pallet punctured the drum, causing the paint to be released in the trailer of the vehicle.

A hose failed while a tanker truck was unloading sodium hydroxide at a customer's location, resulting in the release of 30 gallons of the substance to the soil. The company hired a contractor to conduct the clean up.

Updated 12/03/03

Hazardous Substance Releases Profile for Bates County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Bates County:	1	2	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	1.0	0.8
Type(s) of Substance(s) Released: Ammonia (2 events) Potash			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (1) Intentional or illegal act (1)	Illicit drug production (1) Vehicle/vessel rollover (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, admitted
Number of Events with Evacuations:	1
Total Number of People Evacuated:	2
Number of Methamphetamine-Related Events:	2

Interesting Events: The tow hitch on a truck towing two anhydrous tanks broke. The two tanks struck an embankment and overturned; one started leaking ammonia. The Missouri Highway Patrol officer responding to the accident evacuated the surrounding area until the responsible party arrived and secured the release. An unknown amount of ammonia was released.

The driver of a tractor trailer drove into the median, traveled across the opposite driving lanes, drove back into the median, and went airborne. The truck and trailer came to rest in a river, spilling 24 tons of potash. The driver received traumatic injuries from the accident and was transported to the hospital. The driver was issued a summons for careless and imprudent driving.

Updated 12/03/03

Hazardous Substance Releases Profile for Bollinger County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Bollinger County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Chlorine			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A fusible line at a water treatment plant failed and caused an unknown amount of chlorine to be released. A nearby resident heard an exterior alarm going off and called a city employee. The employee responded and notified the fire department, who assembled a Haz-Mat team and secured the release.

Updated 12/03/03

Hazardous Substance Releases Profile for Boone County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Boone County:	8	6	14
No. of Events Statewide:	201	193	394
Percentage of State Totals:	4.0	3.1	3.6
Type(s) of Substance(s) Released: Adhesive Ammonia (2 events) Fertilizer Mercury Methamphetamine Chemicals MIX: Hydrochloric Acid/Phosphoric Acid Oxygen Phosphoric Acid (2 events) Solvent (2 events) Tetrachloroethylene Xylene			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (9) Intentional or illegal act (3) Unknown (1)	Broken thermometer (1) Explosion (1) Fire (3) Forklift puncture (3) Illicit drug production (3) Improper loading (2) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (3) General Public (4)	Burns-Not chemical related Respiratory irritation Trauma-Chemical related Trauma-Not chemical related
Injury Outcomes:	Death after arrival at hospital (1) Seen by private physician within 24 hours (1) Treated at hospital, admitted (3) Treated at hospital, not admitted (2)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	1
Number of Methamphetamine-Related Events:	3

Interesting Events: A fire department was called to respond to a report of a fire in a vehicle parked outside of a private residence. Upon arrival, vapors could be seen in the closed vehicle, ammonia was spilling on the ground, and a strong odor of ammonia covered about half of a city block. A valve on an unapproved container holding anhydrous ammonia failed and released the ammonia. One resident who was known to have chronic breathing problems was evacuated from the surrounding area. Police searched the residence and found additional meth lab materials.

A fire caused by unknown origin in a private residence resulted in the death of the homeowner and

injuries to two members of the general public. There were several oxygen tanks in the residence that exploded during the fire. After the first tank exploded, the force blew the homeowner out of a window. Two individuals driving by saw the victim and attempted to pull him from the scene; however, additional oxygen tanks then exploded, injuring the two men who were attempting to assist the homeowner. A total of seven tanks exploded.

Updated 12/03/03

Hazardous Substance Releases Profile for Buchanan County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Buchanan County:	3	2	5
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	1.0	1.3
Type(s) of Substance(s) Released: Ammonia (3 events) Corrosive MIX: Hydrogen Peroxide/Peracetic Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (3) Human error (1) Unknown (1)	Improper loading (1) Puncture (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Burns-Chemical related Respiratory irritation
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A pop off valve on a compressor at a food processing facility failed, causing 1,100 pounds of ammonia to be released. The compressor was on the roof of the building, and the ammonia was allowed to dissipate. An evacuation of the employees was not necessary.

While working on a cooling apparatus at medical facility, a contractor received chemical burns when a pressure build up caused ammonia to spill from the system onto the contractor's leg. The contractor also experienced respiratory irritation and was transported to the hospital for treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Butler County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Butler County:	1	1	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.5	0.5
Type(s) of Substance(s) Released: Hydrochloric Acid (2) Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (1)	Improper loading (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Gastrointestinal problems Headache
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	1
Total Number of People Evacuated:	9
Number of Methamphetamine-Related Events:	0

Interesting Events: Twelve cars derailed when a cross key and draw bar, which are part of a coupling, came unfastened. The coupling fell between the tracks. One tanker car was carrying hydrochloric acid, but none of the acid was released. The highway was closed for 2 1/2 hours until the situation could be assessed to ensure public safety. During the derailment, the train also struck a signal cabinet which contained several lead batteries. The batteries were broken and an unknown amount of sulfuric acid was released, but was contained to the immediate area. Officials estimated that replacing the signal shed could cost as much as \$250,000.

Nine employees were evacuated from a United Parcel Service office when a box was observed to be "smoking". The box was isolated and it was determined that it contained hydrochloric acid. One employee who came in contact with the box experienced gastrointestinal problems and a headache, and was treated at a local hospital. The building was evacuated for three hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Callaway County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Callaway County:	3	1	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.5	1.0
Type(s) of Substance(s) Released: Benzoyl Peroxide Carbon Monoxide Caustic Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (2) Human error (2)	Improper loading (1) System/process upset (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Eye irritation
Injury Outcomes:	Treated on scene
Number of Events with Evacuations:	2
Total Number of People Evacuated:	298
Number of Methamphetamine-Related Events:	0

Interesting Events: A defective motor on the flue of a hot water heater at a fast food restaurant caused carbon monoxide to build up. One employee experienced eye irritation and was treated at the scene. The restaurant employees and patrons were evacuated for 45 minutes while repairs were made and the area was ventilated.

An open container of benzoyl peroxide was found at an electric transformer plant. The chemical (which is safe if kept moist) had dried out, leaving it very volatile. 275 employees were evacuated while a certified Haz-Mat team and a bomb squad from the Missouri Highway Patrol removed the container. The facility was evacuated for over 14 hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Cape Girardeau County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Cape Girardeau County:	6	0	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	3.0	0.0	1.5
Type(s) of Substance(s) Released: Ammonia (5 events) Chloroform			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (4) Unknown (1)	Illicit drug production (4) Open valve (1) System/process upset (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	4
Interesting Events: Four events involved the release of unknown amounts of ammonia at different agricultural businesses. All four releases were due to theft of ammonia for the production of methamphetamine. Twelve pounds of ammonia was released in a fifth event, but it was not clear if the release was caused by a faulty valve or attempted theft.	

Updated 12/03/03

Hazardous Substance Releases Profile for Cass County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Cass County:	5	1	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	2.5	0.5	1.5
Type(s) of Substance(s) Released: Acetone (2 events) Ammonia Bromine Ether Plaster agent Polychlorinated Biphenyls Toluene (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (2) Intentional or illegal act (1) Unknown (2)	Illicit drug production (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (5) General Public (1) Police Officer (1)	Headache Respiratory irritation Trauma-Not chemical related
Injury Outcomes:	Injuries reported by official, outcome not known (5) Seen by private physician within 24 hours (1) Treated on scene (1)
Number of Events with Evacuations:	2
Total Number of People Evacuated:	12
Number of Methamphetamine-Related Events:	1

Interesting Events: A fire department was dispatched to an apartment building after an unknown chemical odor was detected. Upon entry into the building, fire department personnel discovered that plaster agent has been spilled inside one of the apartments and the vapors had entered other apartments through the ventilation system. The residents were evacuated. One resident was treated for respiratory irritation and the other occupants were taken outside and evaluated for possible symptoms.

A fire department was dispatched to a sheltered workshop after employees noticed unknown chemical odors. After investigation by the fire department and the Department of Natural Resources, it was discovered that acetone and toluene had been released to the sewer system, and the vapors had entered the building. It could not be determined who the responsible party was. Three employees of the workshop and one employee of a heating and cooling company who was at the scene experienced respiratory irritation. The employees were evacuated for over ten hours.

Hazardous Substance Releases Profile for Christian County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Christian County:	1	1	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.5	0.5
Type(s) of Substance(s) Released: Ammonia Ethyl Ether Paint Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (2)	Illicit drug production (1) Unauthorized/improper dumping (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: Two police officers experienced respiratory irritation when they discovered materials used to produce methamphetamine in an abandoned vehicle. The officers reported using adequate personal protective equipment, but the exact type of equipment used was not known. The officers were exposed to the chemicals for 30 minutes.	

Updated 12/03/03

Hazardous Substance Releases Profile for Clay County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Clay County:	3	3	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	1.6	1.5
Type(s) of Substance(s) Released: Fluorosilicic Acid Herbicide Hydrochloric Acid Malathion MIX: EPA D002: Corrosive Waste/EPA D004: Arsenic-Containing Hazardous Waste/EPA D005: Barium-Containing Hazardous Waste/EPA D006: Cadmium-Containing Hazardous Waste/EPA D007: Chromium-Containing Hazardous Waste/EPA D008: Lead-Containing Hazardous Waste/E MIX: Toluene/Xylene			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (5)	Improper loading (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
General Public (1)	Burns-Chemical related Respiratory irritation
Injury Outcomes:	Seen by private physician within 24 hours
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Two tanks containing fluorosilicic acid at a water supply facility were inspected. When the inspection was complete, the employee forgot to open up a valve to equalize pressure between the two tanks. A delivery was made later in the day and the 40 gallons of the chemical overflowed due to this error. The material was neutralized prior to being released into the storm sewer.

An individual at a private residence spilled a concentrated flea dip containing malathion in the garage and attempted to clean it up with bare hands. The individual experienced chemical burns and respiratory irritation. The individual would not go to the hospital for treatment but was seen by a private physician within 24 hours of exposure.

Updated 12/03/03

Hazardous Substance Releases Profile for Cole County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Cole County:	2	1	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.5	0.8
Type(s) of Substance(s) Released: Carbon Monoxide Mercury Sodium Chloride			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (2)	Broken thermometer (1) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (4)	Burns-Not chemical related Eye irritation Respiratory irritation
Injury Outcomes:	Death on scene/on arrival at hospital (1) Treated at hospital, not admitted (1) Treated on scene (2)
Number of Events with Evacuations:	2
Total Number of People Evacuated:	328
Number of Methamphetamine-Related Events:	0

Interesting Events: A large science lab thermometer was dropped and broke in a classroom. 27 students and 1 teacher were evacuated from the area. Department of Natural Resources staff responded, took environmental samples, removed the carpet and vented the room for the remainder of the day. Readings were at acceptable levels in time for the room to be reoccupied the next day.

The driver of a tractor trailer carrying 20 tons of sodium chloride rear ended another vehicle while traveling on the highway. The tractor trailer overturned, spilling all of the sodium chloride on the roadway. The vehicle then caught fire. The driver of the tractor trailer died at the scene from burns sustained in the fire.

Updated 12/03/03

Hazardous Substance Releases Profile for Cooper County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Cooper County:	5	1	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	2.5	0.5	1.5
Type(s) of Substance(s) Released: Ammonia (4 events) Phosphoric Acid Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (3) Human error (1) Intentional or illegal act (2)	Illicit drug production (1) Improper loading (1) Unauthorized/improper dumping (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Respiratory irritation
Injury Outcomes:	Seen by private physician within 24 hours
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: A police officer experienced respiratory irritation when responding to a call of an attempted theft of ammonia at an agricultural co-op. It is believed the ammonia was being stolen to be used for production of methamphetamine. An unknown amount of ammonia was released.	

Updated 12/03/03

Hazardous Substance Releases Profile for Crawford County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Crawford County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Argon Paint			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (1) Human error (1)	Vehicle or vessel collision (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2)	Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: 40,000 pounds of Argon was released after the driver of the truck lost control and the vehicle overturned. The trailer began leaking the gas. Both lanes of I-44 were closed for four hours. The two employees in the vehicle were treated at a hospital for traumatic injuries caused by the accident.

Updated 12/03/03

Hazardous Substance Releases Profile for Dade County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Dade County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Hydrochloric Acid Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act	Illicit drug production

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Headache Respiratory irritation Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: While searching a vehicle, a police officer removed a container of hydrochloric acid from a duffle bag that also contained the components of a meth lab. The safety gloves worn by the officer were punctured by a piece of glass, causing a cut on the officer's hand. The officer also experienced respiratory irritation and a headache as a result of exposure to the chemicals and their odors. The officer was exposed to the chemicals for 15 minutes.	

Updated 12/03/03

Hazardous Substance Releases Profile for Dallas County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Dallas County:	3	1	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.5	1.0
Type(s) of Substance(s) Released: Acid Ammonia (2 events) Ethyl Ether Hydrochloric Acid (2 events) Iodine (2 events) Methamphetamine Chemicals Phosphorus (2 events) Solvent (2 events) Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (4)	Illicit drug production (4)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (8)	Eye irritation Headache Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	4

Interesting Events: Eight police officers were injured in four separate events involving methamphetamine. Three events occurred at private residences, while the fourth event involving a meth lab that was discovered in a vehicle during a routine traffic stop. The length of exposure ranged from 15 minutes to 90 minutes.

Updated 12/03/03

Hazardous Substance Releases Profile for Daviess County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Daviess County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Pesticide			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A leaking valve on a spray rig owned by an agricultural facility resulted in the release of two gallons of pesticide to the roadway. No injuries were reported.

Updated 12/03/03

Hazardous Substance Releases Profile for Dent County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Dent County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Mercury			

Primary Contributing Factors:	Secondary Contributing Factors:
Unknown	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Police went to a private residence to notify the occupant of an accident involving a relative. They entered the residence and found a deceased person in the bathroom. Upon removing the body, they noticed what appeared to be mercury in the toilet. Approximately 1/2 ounce of mercury was collected. No one knew how the mercury had gotten there or if any of it had been flushed into the sewer system.

Updated 12/03/03

Hazardous Substance Releases Profile for Dunklin County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Dunklin County:	3	0	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.0	0.8
Type(s) of Substance(s) Released: Ethyl Ether (2 events) Mercury			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (2)	Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Headache Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	2

Interesting Events: Two police officers were injured in two separate events involving methamphetamine. One officer experienced respiratory irritation and a headache after responding to a call of strong odors near a roadway. The odor originated from a trailer. When the officer entered the trailer, a white fog filled the room from ether that was being improperly stored with no ventilation. The officer was exposed to the substance for ten minutes. A second officer was injured after a meth lab was discovered in a vehicle, and was exposed to ether for 45 minutes. No personal protective equipment was available in either event.

Updated 12/03/03

Hazardous Substance Releases Profile for Franklin County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Franklin County:	3	1	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.5	1.0
Type(s) of Substance(s) Released: Ammonia Ethyl Ether Hydrochloric Acid (2 events) Ink Sodium Hydroxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (1) Performing maintenance (1) Unknown (1)	Clogged sewer (1) Illicit drug production (1) Improper loading (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: Two police officers experienced headaches while collecting evidence from a very large methamphetamine lab in a private residence. The officers reported using respirators during the event and were exposed to the chemicals for 12 hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Greene County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Greene County:	13	20	33
No. of Events Statewide:	201	193	394
Percentage of State Totals:	6.5	10.4	8.4
Type(s) of Substance(s) Released: 3-Aminopropyltrimethoxysilane Acid Adhesive (2 events) Ammonia (3 events) Battery Acid Carbon Monoxide Coating Solution Cumene Hydroperoxide Ethyl Ether (4 events) Fluorosilicic Acid Hydrochloric Acid (2 events) Hydrogen Peroxide Hydrogen Sulfide Iodine Isopropanol Lead Lithium (2 events) Lye Methanol Methylene Chloride MIX: Mineral Spirits/n-Propyl Acetate Nitrogen Paint Phosphorus Potassium Hydroxide Sodium Hydroxide Sodium Metasilicate Solvent Sulfuric Acid Tert-nonyl mercaptan Toluene Xylene			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (6) Human error (17) Intentional or illegal act (8) Unknown (2)	Forklift puncture (5) High winds (1) Human error (1) Illicit drug production (7) Improper loading (10) Loose caps (1) Loose valve (1) Performing maintenance (1) Puncture (1)

Unauthorized/improper dumping (1) Vehicle or vessel collision (1)
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Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (7) General Public (14) Police Officer (8) Professional Firefighter (1)	Carbon monoxide poisoning Headache Respiratory irritation Shortness of breath Skin irritation Trauma-Not chemical related
Injury Outcomes:	Death on scene/on arrival at hospital (1) Injuries reported by official, outcome not known (9) Treated at hospital, not admitted (18) Treated on scene (2)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	Unknown
Number of Methamphetamine-Related Events:	7
<p>Interesting Events: Failure of a boiler motor caused carbon monoxide to be released near a hotel, and high winds caused it to enter the ventilation system. The fire department initially responded after two children became ill. When the physician at the hospital suspected carbon monoxide poisoning, a HazMat team was dispatched. The occupants and employees of the hotel were evacuated and the hotel remained closed until the wing could be ventilated and CO2 levels were again in the acceptable range. A total of 11 people experienced carbon monoxide poisoning.</p> <p>Five events involving methamphetamine resulted in injuries to seven police officers. The officers were injured while collecting evidence at private residences. The length of exposure ranged from 90 minutes to three hours.</p> <p>A member of the general public died at the scene of a motor vehicle accident involving a tractor trailer. Battery acid was released after the collision. The injuries sustained were due to the trauma of the accident and were not related to the substance released.</p>	

Updated 12/03/03

Hazardous Substance Releases Profile for Harrison County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Harrison County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Ammonia			

Primary Contributing Factors:	Secondary Contributing Factors:
Unknown	Broken valve

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2) General Public (1)	Respiratory irritation
Injury Outcomes:	Treated at hospital, admitted (2) Treated at hospital, not admitted (1)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	70
Number of Methamphetamine-Related Events:	0

Interesting Events: A truck pulling a nurse tank came to an agricultural facility to fill up with anhydrous ammonia. After hooking up to the supply tank, the truck suddenly rolled forward and broke the valve, cause anhydrous to leak from the broken connection. The material was released quickly and exploded, according to reports. It was not known if the driver failed to put the truck into gear or if the truck slipped out of gear. Two employees experienced respiratory irritation; both were released from the hospital within 24 hours. The third victim was a customer of the business who was standing downwind from the tank and inhaled some of the ammonia, and was transported to a hospital in serious condition. Six employees and customers at the facility were immediately evacuated. A high school is located approximately one mile north of the plant. There were several students and teachers remaining at the school, in addition to individuals who were setting up for a meeting at the high school later that evening. It was estimated that 45 students and 25 teachers were evacuated.

Updated 12/03/03

Hazardous Substance Releases Profile for Henry County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Henry County:	5	0	5
No. of Events Statewide:	201	193	394
Percentage of State Totals:	2.5	0.0	1.3
Type(s) of Substance(s) Released: Ammonia (4 events) Freon			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Intentional or illegal act (4)	Illicit drug production (4)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Unknown victim category (2)	Respiratory irritation
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	1
Total Number of People Evacuated:	2
Number of Methamphetamine-Related Events:	4

Interesting Events: The compressor unit at a gasoline service station developed a freon leak. Two individuals experienced respiratory irritation and were evacuated from the building; however, it is not known if both were employees or one was a member of the general public, and one was an employee. The system was checked and the building ventilated with positive pressure.

One hundred pounds of ammonia was released at an agricultural facility due to attempted theft for methamphetamine production. Police and fire department personnel responded to the scene. The facility's response team also responded to secure the leak.

Updated 12/03/03

Hazardous Substance Releases Profile for Hickory County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Hickory County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Iodine Phosphorus Sodium Hydroxide Solvent			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal ac	Illicit drug production

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: The police officer experienced a headache after responding to a methamphetamine lab in a private residence. The only personal protective equipment worn by the officer was boots. The officer was exposed to the substances for two hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Holt County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Holt County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: MIX: Atrazine/Fertilizer/Permethrin			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A vehicle carrying a tank containing a mixture of atrazine, fertilizer and permethrin was traveling on the highway. The hose on the tank ruptured, causing 350 gallons of the mixture to spill on the roadway. The Missouri Department of Transportation assisted the responsible party with cleaning up the spill and remediating the area.

Updated 12/03/03

Hazardous Substance Releases Profile for Howell County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Howell County:	0	3	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.6	0.8
Type(s) of Substance(s) Released: Ammonium Nitrate Battery Acid Creosote Diesel Fuel Sodium Cyanide			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (1) Equipment failure (1) Unknown (1)	Human error (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2) Professional Firefighter (8)	Burns-Chemical related Eye irritation Gastrointestinal problems Headache Skin irritation
Injury Outcomes:	Injuries reported by official, outcome not known (1) Treated at hospital, not admitted (1) Treated on scene (8)
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Heavy rains and flooding caused a railroad track to wash out, resulting in the derailment of 14 cars. Acid and diesel fuel were released from the locomotives. In an attempt to block the spill, firefighters attempted to construct a dam out of railroad ties to prevent more materials from entering a nearby creek. Eight firefighters were exposed to acid, diesel fuel and creosote from the ties while working in the water and suffered minor burns to the skin. One firefighter was treated at the hospital because some of the material got in his eyes. One police officer experienced gastrointestinal problems from fumes from the diesel fuel that was spilled.

Updated 12/03/03

Hazardous Substance Releases Profile for Iron County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Iron County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Lead Zinc Sulfate			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (2)	Vehicle/vessel rollover (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2)	Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Two individuals suffered traumatic injuries during two separate motor vehicle accidents. In one accident, 22 tons of lead was spilled when the vehicle overturned. The second accident involved the release of 5,732 gallons of zinc sulfate when the vehicle overturned.

Updated 12/03/03

Hazardous Substance Releases Profile for Jackson County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Jackson County:	12	22	34
No. of Events Statewide:	201	193	394
Percentage of State Totals:	6.0	11.4	8.6
Type(s) of Substance(s) Released: 4-(N-Ethyl-N-2-methanesulfonylaminoethyl) Acetone (2 events) Acetylene Acid Adhesive Amine Carbon Monoxide Corrosive (2 events) DOT 2920: Corrosive Liquid, Flammable Dye Ethanol (2 events) Hydrogen Isobutane Mercury (5 events) MIX: Ammonium Hydroxide/Methylene Chloride MIX: Cyclohexylamine/Morpholine MIX: Dicamba /Urea Fertilizer MIX: D-limonene/Ethanolamine MIX: Isobutane/Sulfuric Acid/Sulfuric Acid MIX: Potassium Hydroxide/Sodium Metasilicate MIX: Toluene/Xylene Phosphoric Acid (2 events) Photographic Chemical Polychlorinated Biphenyls (2 events) Resin Solution (3 events) Sodium Hydroxide Sulfuric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (1) Equipment failure (5) Human error (23) Unknown (5)	Broken thermometer (2) Equipment failure (1) Fire (1) Forklift puncture (5) Heavy rain (1) Improper loading (10) Leaking dome lid (1) Load shift (1) Loose valve (2) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (3) General Public (2)	Burns-Not chemical related Carbon monoxide poisoning

	Eye irritation
Injury Outcomes:	Injuries reported by official, outcome not known (2) Treated at hospital, admitted (2) Treated at hospital, not admitted (1)
Number of Events with Evacuations:	2
Total Number of People Evacuated:	320
Number of Methamphetamine-Related Events:	0
<p>Interesting Events: An employee at a petroleum refinery equipment facility was sprayed with a mixture of sulfuric acid/isobutane. After going to the wash station, the employee returned to find the source of the leak, and got more product on him and went to the eye wash station. While he was there, a fire and explosion occurred. Two other employees were in the lab at the time of the explosion. 300 employees were evacuated. The evacuation was prompted by misinformation; the fire department was informed there was 4,000 lbs of hydrogen gas inside the building, when there were actually only two cylinders under 4,000 lbs. PSI. The fire department delayed entering the building for several hours because of this information. The victims experienced eye irritation from exposure to sulfuric acid/isobutane mixture, but the exact amount released was not known. Equipment failure or malfunction was thought to be the cause per the fire department investigative report.</p> <p>A furnace malfunctioned in an apartment building, causing two occupants to experience carbon monoxide poisoning. 20 occupants were evacuated from the building while the furnace was fixed and the carbon monoxide was allowed to dissipate.</p>	

Updated 12/03/03

Hazardous Substance Releases Profile for Jasper County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Jasper County:	14	2	16
No. of Events Statewide:	201	193	394
Percentage of State Totals:	7.0	1.0	4.1
Type(s) of Substance(s) Released: Acetone Ammonia (2 events) Hydrochloric Acid (4 events) Iodine (2 events) Magestral Acetate Methamphetamine Chemicals (3 events) MIX: Diesel Fuel/Pentachlorophenol Pentachlorophenol Peracetic Acid Potassium Hydroxide Resin Solution Solvent (2 events) Sulfuric Acid (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (4) Human error (5) Intentional or illegal act (6) Unknown (1)	Broken container (1) Fire (1) Illicit drug production (6)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (4) Police Officer (14) Professional Firefighter (1)	Burns-Chemical related Eye irritation Headache Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known (14) Treated at hospital, not admitted (4) Treated on scene (1)
Number of Events with Evacuations:	2
Total Number of People Evacuated:	75
Number of Methamphetamine-Related Events:	6

Interesting Events: Fourteen police officers experienced injuries in six separate events involving methamphetamine production. Five officers were injured while processing evidence collected from methamphetamine labs; two were injured after they discovered a meth lab in a vehicle during a traffic stop; and the remainder were injured during the execution of search warrants at private residences where methamphetamine was being made.

The pressure relief valve on a refrigeration system at a cold storage warehouse opened unexpectedly and released 2,129 pounds of ammonia. The valve then closed itself. Fifteen employees were moved to another section of the building until the odors dissipated. The system was shut down for repair. The

employees were allowed to return in approximately one hour.

An employee at a wood products manufacturing facility used a cutting torch during maintenance and ignited a preservative mixture used to treat utility poles. One firefighter experienced eye irritation and was treated on scene after some of the contaminated water splashed into his eyes. Sixty employees were evacuated. The facility was badly damaged by the fire and did not immediately reopen.

Updated 12/03/03

Hazardous Substance Releases Profile for Jefferson County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Jefferson County:	2	2	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	1.0	1.0
Type(s) of Substance(s) Released: Chlorine Ethyl Ether Hydrochloric Acid Methamphetamine Chemicals Polymer			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (1) Intentional or illegal act (2)	Equipment failure (1) Illicit drug production (2) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (9) General Public (61) Police Officer (2) Professional Firefighter (1)	Headache Respiratory irritation Trauma-Chemical related Trauma-Not chemical related
Injury Outcomes:	Injuries reported by official, outcome not known (2) Treated at hospital, admitted (2) Treated at hospital, not admitted (69)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	400
Number of Methamphetamine-Related Events:	2

Interesting Events: Four employees and 63 members of the general public experienced respiratory irritation after 16,900 pounds of chlorine was released at a chemical repackaging facility. A rail tank car was unloading the chlorine when the flex hose ruptured. An automatic shut-off valve on the car failed to work, and an emergency shut-off system at the plant also failed to work. 400 employees and private citizens were evacuated from the area for almost eight hours.

A fire department was responding to a fire at a private residence. As the firefighter neared the burning house, a blast from inside threw him back 10 feet and caused traumatic injuries. The owner's son, who was in the home at the time, left the scene after firefighters arrived. Investigators found evidence of an active methamphetamine lab in the home and believed it may have been the cause of the fire and explosion.

Hazardous Substance Releases Profile for Johnson County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Johnson County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Ammonia Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act	Illicit drug production

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1

Interesting Events: One police officer experienced respiratory irritation after responding to a report of a methamphetamine lab in a private residence. Meth chemicals were found in the home and in the yard. The officer reported wearing a respirator and was exposed to the chemicals for 90 minutes.

Updated 12/03/03

Hazardous Substance Releases Profile for Laclede County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Laclede County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Hydrochloric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	1
Total Number of People Evacuated:	12
Number of Methamphetamine-Related Events:	0

Interesting Events: 300 gallons of hydrochloric acid was released from a storage tank at an agricultural facility due to the failure of the pump or valve. Three firefighters and a reporter from the local media were decontaminated on scene. The employees on site were evacuated, as well as two residences and nearby businesses. Streets were closed for a block in every direction for two hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Lawrence County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Lawrence County:	5	4	9
No. of Events Statewide:	201	193	394
Percentage of State Totals:	2.5	2.1	2.3
Type(s) of Substance(s) Released: Acetone Ammonia (3 events) Cypermethrin Ephedrine (2 events) Hydrochloric Acid Lithium Methamphetamine Chemicals (2 events) MIX: Ephedrine/Solvent NPK Fertilizer Phosphorus (2 events) Prodiamine Solvent (3 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (7) Unknown (1)	Illicit drug production (7) Loose lid (1) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
General Public (2) Police Officer (8)	Burns-Chemical related Dizziness/CNS symptoms Headache Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known (8) Treated at hospital, not admitted (2)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	20
Number of Methamphetamine-Related Events:	7

Interesting Events: Ten individuals were injured in seven separate events, all of which involved methamphetamine production. Two members of the general public received chemical burns and were treated at a hospital after someone attempted to steal ammonia from a storage tank at a poultry processing facility. It was not known if the individuals were involved with the theft. 20 residents were evacuated from their homes for approximately one hour while police and fire department personnel responded and secured the release. Eight police officers were injured in six events involving the execution of search warrants or the collection and processing of chemicals related to methamphetamine production found in private residences or vehicles.

Hazardous Substance Releases Profile for Lincoln County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Lincoln County:	3	0	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.0	0.8
Type(s) of Substance(s) Released: Ammonia (3 events) Ethyl Ether Hydrochloric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (3)	Illicit drug production (3)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	3

Interesting Events: A police officer experienced a headache after assisting in the collection of methamphetamine materials at a private residence. The officer reported wearing a respirator and was exposed to the substances for 90 minutes.

Updated 12/03/03

Hazardous Substance Releases Profile for Linn County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Linn County:	2	0	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.0	0.5
Type(s) of Substance(s) Released: Battery Acid Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (1) Unknown (1)	Fire (1) Illicit drug production (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	1
Total Number of People Evacuated:	100
Number of Methamphetamine-Related Events:	1

Interesting Events: A recycling facility caught fire for unknown reasons and was completely destroyed. There were approximately 20 tons of car batteries in the facility that were involved in the fire. It is not known how much acid was released. 100 individuals were evacuated from the area.

An individual was observed dumping methamphetamine waste into a creek just above the pumping station for a city drinking water lake. Law enforcement was dispatched to the scene. The individual had returned to the scene as well and was arrested. The pumping station was shut down until the materials could be recovered and environmental sampling was conducted to ensure that any remaining chemicals were diluted enough to have no negative impact on the drinking water supply.

Updated 12/03/03

Hazardous Substance Releases Profile for Livingston County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Livingston County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Ammonium Nitrate			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Vehicle/vessel rollover

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Trauma-Not chemical related
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: The driver of a Terra-Gator fertilizer spreader went off the right side of the road, causing the spreader to overturn and spill six tons of ammonium nitrate. The Missouri State Highway Patrol reported that the employee was injured in the accident, but he elected to seek his own treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Macon County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Macon County:	3	1	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.5	1.0
Type(s) of Substance(s) Released: Ammonia (4 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Intentional or illegal act (3)	Illicit drug production (3) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (3)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	3

Interesting Events: Three police officers experienced respiratory irritation during three separate events involving methamphetamine production. One event resulted from attempted theft of ammonia at an agricultural facility. Two events involved officers involved in the collection of methamphetamine related evidence at private residences. The length of exposure ranged from 30 minutes to three hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Maries County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Maries County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Carbon Monoxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Unknown	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Student (10)	Carbon monoxide poisoning
Injury Outcomes:	Seen by private physician within 24 hours (2) Treated at hospital, not admitted (8)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	87
Number of Methamphetamine-Related Events:	0

Interesting Events: Children were complaining of feeling sick while at school in a church. The teachers suspected it might be carbon monoxide so the church was evacuated. The fire department, a heating and cooling repair company, and a gasoline company came by to the church to run tests and could not find anything out of the ordinary. There were low levels of carbon monoxide found in the children who were sent to the hospital, but the cause or source could not be determined.

Updated 12/03/03

Hazardous Substance Releases Profile for Marion County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Marion County:	6	0	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	3.0	0.0	1.5
Type(s) of Substance(s) Released: Etchall Ethylene Dichloride (2 events) MIX: EPA D001: Ignitable Waste/Ethylene Dichloride Paint Toluene			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (1) Equipment failure (3) Human error (1) Unknown (1)	Fire (1) Power failure/electrical problems (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Student (2)	Respiratory irritation
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A faulty incinerator at a pesticide and agricultural chemicals manufacturer resulted in the release of 1,6000 pounds of ethylene dichloride. The substance was released through a vent into the atmosphere. The company's response team secured the release and made repairs to the incinerator.

Elementary students were conducting a science experiment involving Etchall, a substance which contains ammonium bifluoride. The students were eating food while doing the experiment and had the substance on their hands. They experienced respiratory irritation and were transported to a hospital for treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Mississippi County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Mississippi County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Nitrogen Fertilizer Vinyl Toluene			

Primary Contributing Factors:	Secondary Contributing Factors:
Unknown (2)	Gasket missing (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: An individual was transporting a liquid nitrogen tank to a farm field. While en route, the tank began leaking and an unknown amount was released to the roadway. The fire department responded and determined that the amount of spillage did not pose a threat to the public or to the environment.

A vacuum and pressure release valve were missing from a tank that was being used to transport vinyl toluene. One gallon of the substance was released en route to the customer's location. The driver replaced the gaskets to control the release.

Updated 12/03/03

Hazardous Substance Releases Profile for New Madrid County, 2002

	Fixed Facility	Transportation	Total
No. of Events in New Madrid County:	2	3	5
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	1.6	1.3
Type(s) of Substance(s) Released: 2-(Thiocyanomethylthio)benzothiazole Alcohol Ink Paint Polycyclic Aromatic Hydrocarbons Solvent			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (3) Unknown (1)	Fire (1) Improper loading (3) System/process upset (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A lumber company was heavily damaged after a fire started due to unknown reasons. The building contained numerous containers of paints and solvents, which were consumed in the fire. The runoff was blocked to check for chemicals. Fire department personnel were at the scene for over 12 hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Newton County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Newton County:	9	2	11
No. of Events Statewide:	201	193	394
Percentage of State Totals:	4.5	1.0	2.8
Type(s) of Substance(s) Released: Acetone Ammonia (5 events) Argon Ethyl Ether Iodine (2 events) Lead Lye MIX: Acetate /Phosphoric Acid/Sodium Octyl Sulfate Paint Phosphorus (2 events) Sodium Hydroxide Sulfuric Acid (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (7) Human error (1) Intentional or illegal act (2) Unknown (1)	Fire (1) Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2) Police Officer (4)	Burns-Chemical related Dizziness/CNS symptoms Headache Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known (4) Treated at hospital, not admitted (2)
Number of Events with Evacuations:	3
Total Number of People Evacuated:	324
Number of Methamphetamine-Related Events:	2

Interesting Events: A faulty hanger at a food supply facility allowed an air conditioning unit to slip and the coolant line ruptured. An employee attempted to secure the release without donning any personal protective equipment and suffered first and second degree chemical burns. All other employees were on break in the cafeteria at the time of the release. 125 employees were evacuated for seven hours.

A damaged compressor at a poultry processing facility caused approximately 15 pounds of ammonia to be released. 178 employees and occupants of a nearby hotel were evacuated from the area for one hour.

Four police officers experienced headaches, respiratory irritation and dizziness while collecting

evidence from two separate methamphetamine labs in private residences. All officers reported wearing adequate personal protective equipment and were exposed to the chemicals for 30-45 minutes.

Updated 12/03/03

Hazardous Substance Releases Profile for Nodaway County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Nodaway County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Fertilizer			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Improper loading

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A fertilizer tank was not properly secured to the vehicle when it was loaded. The driver pulled the tank along approximately two miles of highway, releasing the contents to the roadway. The Missouri Department of Transportation set up cones on the roadway to deter traffic from driving through the spilled material; however, the highway was not completely closed.

Updated 12/03/03

Hazardous Substance Releases Profile for Oregon County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Oregon County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Ammonium Nitrate			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: During a train inspection, ammonium nitrate was observed to be spilling from a corrosion crack at the center bottom outlet of the car. 3,000 pounds was released.

Updated 12/03/03

Hazardous Substance Releases Profile for Osage County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Osage County:	2	0	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.0	0.5
Type(s) of Substance(s) Released: Ammonia (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (2)	Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1) Professional Firefighter (1)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	1
Total Number of People Evacuated:	Unknown
Number of Methamphetamine-Related Events:	2

Interesting Events: Both events were the result of theft of ammonia for methamphetamine production. In one event, a police officer was assisting with the investigation relating to the theft of anhydrous ammonia. When he arrived, vapor was escaping from the portable tank. While securing the scene, he inhaled some of the ammonia and experienced respiratory irritation. He was exposed to the chemical for less than 30 seconds. In the second event, vandals had opened a valve on one of the storage tanks and left it open. An evacuation was ordered, but when fire department personnel went to the resident's home, they had already evacuated. One firefighter experienced respiratory irritation after exposure to the ammonia. Both events occurred at an agricultural co-op.

Updated 12/03/03

Hazardous Substance Releases Profile for Ozark County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Ozark County:	1	1	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.5	0.5
Type(s) of Substance(s) Released: Methamphetamine Chemicals Pentachlorophenol			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (1)	Fire (1) Illicit drug production (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1

Interesting Events: During a routine traffic stop, a methamphetamine lab was discovered in a vehicle. Officers pursued the vehicle and subsequently processed the evidence after the individual was arrested. One police officer experienced respiratory irritation as a result and was exposed to the chemicals for 90 minutes.

Updated 12/03/03

Hazardous Substance Releases Profile for Pemiscot County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Pemiscot County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Permethrin			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Improper loading

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	1
Total Number of People Evacuated:	Unknown
Number of Methamphetamine-Related Events:	0

Interesting Events: Permethrin was discovered to be leaking from a tractor trailer parked at a travel center/truck stop. A 55 gallon drum had been punctured by an exposed nail on the pallet it was set upon. Everyone in the truck stop and parking lot was evacuated, but the number of people who were involved was not known. Twenty gallons of the substance was spilled.

Updated 12/03/03

Hazardous Substance Releases Profile for Perry County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Perry County:	2	1	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.5	0.8
Type(s) of Substance(s) Released: Mercury Sulfuric Acid Tetrachloroethylene			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (3)	Broken thermometer (1) Inadequate ventilation (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2)	Gastrointestinal problems Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: An employee at a plastic products manufacturing facility ran out of cleaning solution and used tetrachloroethylene instead. The employee was not using any personal protective equipment. The vapors caused the employee to become nauseous. The employee was transported to a hospital for treatment.

A tractor trailer loaded with new batteries was involved in a motor vehicle accident. The trailer overturned and an unknown amount of sulfuric acid began leaking out of the back of the trailer. The Department of Natural Resources staff and the local fire department responded to the scene to assist local officials with the clean up. The driver of the vehicle received cuts as a result of the accident and was transported to a hospital for treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Pettis County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Pettis County:	4	0	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	2.0	0.0	1.0
Type(s) of Substance(s) Released: Ammonia (3 events) Ethyl Ether Toluene Trisodium Phosphate			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (2) Intentional or illegal act (1)	Illicit drug production (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1) Police officer (1)	Eye irritation Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known (1) Treated at hospital, not admitted (1)
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1

Interesting Events: A police officer detected a strong chemical odor coming from a residence and asked the tenant if he could enter the home. Upon entry, the odors were stronger. A methamphetamine lab was discovered in a room with the door closed. When the officer opened the door, his eyes watered profusely and his nose and lungs began to burn. He escorted the suspects out of the residence and allowed the home to ventilate before reentering to collect evidence. He was exposed to the vapors remaining inside the home for three hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Phelps County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Phelps County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Formaldehyde Hydrochloric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Unknown	Loose caps (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	1
Total Number of People Evacuated:	10
Number of Methamphetamine-Related Events:	0

Interesting Events: An employee at a courier service noticed a wet area on a package containing hydrochloric acid. The materials was leaking from a loose cap. The supervisors were notified and placed the package in a spill tub and set it outside of the doorway. The package was checked periodically. Another employee went outside to retrieve the package, which started to smoke (a reaction from coming into contact with water) after it was brought back into the building. Ten employees were evacuated and an environmental contractor was called to retrieve the package.

Updated 12/03/03

Hazardous Substance Releases Profile for Pike County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Pike County:	2	1	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.5	0.8
Type(s) of Substance(s) Released: Formaldehyde (2 events) MIX: Ammonium Nitrate/Fuel Oil			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (1) Human error (2)	System/process upset (2) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Employee error resulted in an overflow of a formaldehyde solution from a process vessel at an industrial organic chemical facility. The chemicals were released for ten minutes before the release was secured. 400 gallons of the 44% formaldehyde solution was released to the gravel. The company's response team secured the release and ensured that there was no environmental damage or off-site health risk from exposure.

The driver of a tractor trailer transporting an ammonium nitrate/fuel oil mixture attempted to make a left hand turn on a slanted roadway. The driver was going too fast and the vehicle overturned. Police and fire department personnel were dispatched to the scene. 5,000 pounds of the mixture was released when the trailer overturned.

Updated 12/03/03

Hazardous Substance Releases Profile for Platte County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Platte County:	2	2	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	1.0	1.0
Type(s) of Substance(s) Released: Battery Acid Chromic Acid Glyphosate Mercury			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (2) Human error (2)	Broken thermometer (1) Improper loading (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: An employee at the airport left a water hose running into a chromic acid tip tank. This caused the tank to overflow to the floor in the building. 800 gallons of the chromic acid/water solution were released. The company contained the release and hired a contractor to clean up the spilled acid.

Updated 12/03/03

Hazardous Substance Releases Profile for Polk County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Polk County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Ammonia Hydrochloric Acid Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act	Illicit drug production

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1

Interesting Events: Two police officers experienced a headache when a meth lab was discovered in a vehicle during a routine traffic stop.

Updated 12/03/03

Hazardous Substance Releases Profile for Pulaski County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Pulaski County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Chlorine HTH Pool Cleaner Paint			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Unauthorized/improper dumping

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2)	Eye irritation Skin irritation
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0
Interesting Events: Two garbage workers emptied a dumpster at an office supply store. Upon reaching their next stop, they noticed fumes coming off of the truck. Thinking the truck was on fire, they inspected the load they were carrying and noticed 50-60 gallons of a greenish substance in the back of the truck. The employee also began experiencing eye and skin irritation. Fire department personnel responded and the truck was taken back to the transfer station. It was determined that paint and an HTH pool cleaner had been improperly disposed of in the dumpster, and the two chemicals reacted causing the release of a chlorine gas. The employees were transported to a hospital for treatment.	

Updated 12/03/03

Hazardous Substance Releases Profile for Putnam County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Putnam County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Mercury			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure	None

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Mercury was discovered to be leaking from a blood pressure cuff at a medical clinic. It was not known how the mercury escaped, as there was no visible hole or break. The impacted area was isolated and Department of Natural Resources staff responded to clean up the mercury and conduct air monitoring.

Updated 12/03/03

Hazardous Substance Releases Profile for Randolph County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Randolph County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Nitric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Improper mixing

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Burns-Chemical related
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: An employee at a motor vehicle parts manufacturer improperly handled nitric acid and was not wearing any personal protective equipment. The acid splashed in the employee's face, causing chemical burns. The employee was transported to a hospital for treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Ray County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Ray County:	1	3	4
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	1.6	1.0
Type(s) of Substance(s) Released: Ammonia (2 events) Epoxy Ethyleneamine			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (3) Intentional or illegal act (1)	Illicit drug production (1) Vehicle or vessel collision (2) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: A pickup truck hauling an ammonia nurse tank turned a sharp corner, causing the tank to run off the road. 750 pounds of ammonia was released. The fire department responded and sprayed the tank with water to minimize vapors while the company secured the valve.	

Updated 12/03/03

Hazardous Substance Releases Profile for Reynolds County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Reynolds County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Lead Sulfide			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions	Vehicle/vessel rollover

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: Icy road conditions caused a dump truck loaded with lead sulfide to slide into a ditch and overturn. Ten tons of lead sulfide was spilled in the ditch when the vehicle overturned.

Updated 12/03/03

Hazardous Substance Releases Profile for Saline County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Saline County:	3	2	5
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	1.0	1.3
Type(s) of Substance(s) Released: Ammonia (3 events) Carbon Monoxide Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (2) Human error (1) Intentional or illegal act (1) Unknown (1)	Illicit drug production (1) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2) General Public (10) Police Officer (2)	Carbon monoxide poisoning Dizziness/CNS symptoms Headache Respiratory irritation
Injury Outcomes:	Observation at hospital; no treatment (1) Treated at hospital, admitted (2) Treated at hospital, not admitted (10) Treated on scene (1)
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1

Interesting Events: The driver of a truck hauling tanks of ammonia attempted to slow down for a vehicle stopping in front of him, and the towed tanks swerved into the path of another tractor trailer. The tractor trailer hit one of the tanks, causing it to rupture and leak the ammonia. The drivers of the vehicles were not injured in the accident; however, nine individuals who were at a nearby Wal-Mart reported to the emergency room within 25 minutes after the accident complaining of respiratory irritation. Traffic was diverted from the area for approximately one hour.

A police officer responded to a call of "two people down" at a livestock facility. He found two people at the facility who were suffering from carbon monoxide poisoning. It was unknown what caused carbon monoxide to be released. The officer was exposed for 20 minutes and experienced a headache.

Updated 12/03/03

Hazardous Substance Releases Profile for Scott County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Scott County:	3	3	6
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	1.6	1.5
Type(s) of Substance(s) Released: Acetylene Ammonia (2 events) Corrosive Methanol Paint (2 events) Solvent			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (3) Human error (2) Unknown (1)	Fire (1) Improper loading (2) Unauthorized/improper dumping (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2)	Burns-Chemical related
Injury Outcomes:	Treated at hospital, admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A salvage yard employee was crushing a 100 pound cylinder which contained some ammonia. The employee was not aware that the cylinder had any chemicals in it and was not wearing personal protective equipment. The ammonia burned the employee's legs and face. The employee was transported to a hospital and admitted for further treatment of chemical burns. The fire department responded and requested assistance from a Haz-Mat team to control the release.

Updated 12/03/03

Hazardous Substance Releases Profile for Shelby County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Shelby County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Ammonia (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (2)	Vehicle/vessel rollover (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
None	N/A
Injury Outcomes:	N/A
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A farmer was pulling a nurse tank on a county road when he noticed the ammonia was leaking from one of the valves. Approximately 4,000 pounds of ammonia was released from the tank. Because the release occurred in a rural area, the ammonia was allowed to dissipate into the air and no evacuations were necessary.

A farmer transporting an ammonia nurse tank to a field. The nurse tank broke free from the truck and overturned, releasing two tons of ammonia. The local fire department responded to isolate the area and allow the ammonia to dissipate into the air.

Updated 12/03/03

Hazardous Substance Releases Profile for St. Charles County, 2002

	Fixed Facility	Transportation	Total
No. of Events in St. Charles County:	3	20	23
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	10.4	5.8
Type(s) of Substance(s) Released: Adhesive Amine Ammonia Ammonium Hydroxide Coating Solution Fertilizer Isopropanol Mercury MIX: Heptane/Naphtha MIX: Methanol/Nitromethane MIX: Polyisocyanate/Xylene/n-Butyl Acetate MIX: Sulfonic Acid LS/Toluene Oxygen Paint Pesticide Phosphoric Acid Potassium Hydroxide Sodium Hydroxide (4 events) Styrene Trichloroethylene			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (4) Human error (19)	Broken thermometer (1) Forklift puncture (4) Improper loading (13) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A gasket failed on a storage tank at a specialty cleaning products manufacturer, allowing the release of 20,000 pounds of sodium hydroxide. The company's response team secured the release and cleaned up the spilled material.

The driver of a truck hauling liquid fertilizer traveled around a curve and went off of the edge of the roadway. The driver overcorrected, causing the vehicle and its contents to overturn. Approximately 30

gallons of fertilizer was released at the scene of the accident. The driver suffered traumatic injuries as a result of the accident and was transported to the hospital for treatment and was admitted.

Updated 12/03/03

Hazardous Substance Releases Profile for St. Francois County, 2002

	Fixed Facility	Transportation	Total
No. of Events in St. Francois County:	9	1	10
No. of Events Statewide:	201	193	394
Percentage of State Totals:	4.5	0.5	2.5
Type(s) of Substance(s) Released: Acetone (3 events) Ammonia (2 events) Ethyl Ether (4 events) Fertilizer Foaminator Hydrochloric Acid (10 events) Phosphorus (2 events)			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (2) Intentional or illegal act (8)	Illicit drug production (8) Vehicle or vessel collision (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2) General Public (1) Police Officer (12)	Burns-Chemical related Dizziness/CNS symptoms Gastrointestinal problems Headache Respiratory irritation Trauma-Not chemical related

Injury Outcomes:	Death on scene/on arrival at hospital (1) Injuries reported by official, outcome not known (10) Treated at hospital, not admitted (4)
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Number of Events with Evacuations:	0
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Total Number of People Evacuated:	0
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Number of Methamphetamine-Related Events:	8
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Interesting Events: Twelve police officers experienced various adverse health effects during the investigation and collection of evidence in eight separate events involving methamphetamine labs in private residences. The length of exposure ranged from five minutes to five hours. Approximately 3,000 pounds of fertilizer was spilled when an agricultural facility vehicle hauling the fertilizing was struck by another car. The driver of the truck received treatment injuries and was treated at the hospital; the driver of the car was pronounced dead at the scene due to injuries sustained in the accident.	
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Updated 12/03/03

Hazardous Substance Releases Profile for St. Louis City , 2002

	Fixed Facility	Transportation	Total
No. of Events in St. Louis City :	9	32	41
No. of Events Statewide:	201	193	394
Percentage of State Totals:	4.5	16.6	10.4
Type(s) of Substance(s) Released: Adhesive Chloroform Corrosive (3 events) Creosote Dipotassium Phosphate Ethanol (2 events) Ethylene Glycol (3 events) Fertilizer Hexamethylenetetramine Hypochlorite Isopropanol Methylene Chloride (2 events) Paint (5 events) Pesticide Phosphoric Acid (2 events) Polyamine Polychlorinated Biphenyls Potassium Fluorotitanate Potassium Hydroxide (2 events) Propynyl butylcarbonate Radioactive Material Resin Solution Sealant Sodium Fluoride (2 events) Sodium Hydroxide (2 events) Sodium Hypochlorite Sodium Silicate Solvent Trifluralin			

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (1) Equipment failure (5) Human error (32) Intentional or illegal act (1) Unknown (2)	Forklift puncture (12) Hit by vehicle (1) Improper loading (9) Lid popped open (1) Loose fitting (1) Loose valve (1) Nail puncture (1) Performing maintenance (1) Ruptured seam (1) System/process upset (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (3)	Dizziness/CNS symptoms Eye irritation Respiratory irritation Skin irritation Trauma-Not chemical related
Injury Outcomes:	Treated at hospital, admitted (1) Treated at hospital, not admitted (2)
Number of Events with Evacuations:	1
Total Number of People Evacuated:	Unknown
Number of Methamphetamine-Related Events:	0
<p>Interesting Events: A trailer owned by a transport trucking firm was discovered to be leaking hypochlorite solution from one of the 55 gallon drums in the trailer. An employee attempted to put absorbent on the chemical that was still inside the trailer and was overcome by the fumes. The employee experienced nausea and respiratory irritation and was treated at the hospital.</p> <p>An employee at a transport trucking firm punctured a drum of methylene chloride with a forklift when unloading the drum from the back of the trailer. The employee inhaled vapors from the leaking chemical and an ambulance was called. While en route to the hospital, the ambulance staff was advised that the hospital would not accept the patient, since the chemical involved was not known at that time. The patient, two ambulance staff, and a staff member from the hospital were in the parking lot in the ambulance. The fire department responded and restricted access to the area. All four individuals were decontaminated. After decontamination, all four were brought into the emergency room for evaluation. The employee was treated for respiratory irritation.</p>	

Updated 12/03/03

Hazardous Substance Releases Profile for St. Louis County, 2002

	Fixed Facility	Transportation	Total
No. of Events in St. Louis County:	13	16	29
No. of Events Statewide:	201	193	394
Percentage of State Totals:	6.5	8.2	7.4
Type(s) of Substance(s) Released: Ammonia (5 events) Chlorine Chloroform Diethyl ketone Flammable Liquid Glyphosate Hydrochloric Acid Hypochlorite Isopropanol Mercury (2 events) MIX: Alkylaryl polyoxethylene/Hydrochloric Acid MIX: Cresol/Xylene MIX: Ethanolamine/Sodium Hydroxide/Sodium Metasilicate MIX: Hydrofluoric Acid/Nitric Acid Paint Phosphoric Acid Potassium Hydroxide Resin Solution Solvent (2 events) Sulfuric Acid (2 events) Toluene Zinc Sulfate			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (8) Factors beyond human control (1) Human error (11) Intentional or illegal act (4) Unknown (5)	Fire (1) Illicit drug production (4) Improper loading (3) Inadequate ventilation (1) Loose caps (4) Motor overturned (1) Nail puncture (1) Puncture (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (2) General Public (1)	Burns-Chemical related Respiratory irritation
Injury Outcomes:	Treated at hospital, not admitted (2) Treated on scene (1)
Number of Events with Evacuations:	4
Total Number of People Evacuated:	95
Number of Methamphetamine-Related Events:	4

Interesting Events: Vandals beat on the lock of an ammonia storage tank with a hammer or other object until the lock broke. Approximately 100 gallons of ammonia was released. It was not proven that the theft was related to methamphetamine production, but the circumstances indicated it most likely was. Fire and police department personnel responded to secure the release and restrict access to the area.

Two employees at a pharmaceutical product manufacturing facility were pouring potassium hydroxide into a metal funnel mounted on top of a recirculating pump when a pressure hose failed and sprayed the solution into the room. Both employees immediately decontaminated on the scene but both experienced chemical burns. One employee was treated on scene; the other was treated at the hospital. Both employees were wearing only eye protection. The fire department responded and made recommendations for upgrading the PPE requirements when working in this area and with this chemical.

Two individuals were driving a vehicle on an interstate highway. A tank in the back of the vehicle contained anhydrous ammonia, which police believe was going to be used to manufacture methamphetamine. The tank ruptured and the individuals jumped out of the vehicle, which then veered off of the road and hit a tree. One individual was found unconscious next to the highway and was transported to the hospital for chemical burns and respiratory irritation. The interstate was closed for four hours while police and fire department personnel secured the release and removed the tank from the area.

Updated 12/03/03

Hazardous Substance Releases Profile for Ste. Genevieve County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Ste. Genevieve County:	3	0	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.5	0.0	0.8
Type(s) of Substance(s) Released: Acid Ethyl Ether (2 events) Hydrochloric Acid (2 events) Phosphorus			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (3)	Illicit drug production (3)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (3)	Dizziness/CNS symptoms Gastrointestinal problems Headache Respiratory irritation

Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	3

Interesting Events: Three police officers experienced various adverse health effects during the investigation and collection of evidence from methamphetamine labs in private residences. The length of exposure for the officers ranged from three to five hours.

Updated 12/03/03

Hazardous Substance Releases Profile for Stone County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Stone County:	2	0	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.0	0.5
Type(s) of Substance(s) Released: Acid (2 events) Ammonia Ethyl Ether Methamphetamine Chemicals			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (2)	Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (7)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	2
Interesting Events: Seven police officers experienced headaches after responding to two separate incidents involving methamphetamine labs in private residences. The officers were involved in the investigation of the labs and the collection of evidence. The officers were exposed to the chemicals for three to four hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Sullivan County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Sullivan County:	2	1	3
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.5	0.8
Type(s) of Substance(s) Released: Ammonia (2 events) Sodium Hydroxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Equipment failure (3)	Performing maintenance (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (1)	Eye irritation Skin irritation
Injury Outcomes:	Treated at hospital, not admitted
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A bung closure on a drum at a transport trucking terminal was out of round, allowing the sodium hydroxide solution to be released. As the freight was being unloaded, the chemical splashed up out of the bung opening and splashed an employee in the eye and on the face and arm. The employee was transported to an emergency room for treatment.

Updated 12/03/03

Hazardous Substance Releases Profile for Taney County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Taney County:	1	1	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.5	0.5
Type(s) of Substance(s) Released: 2-Butoxyethanol Acetone Ammonia Ethyl Ether Hydrochloric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (1) Intentional or illegal act (1)	Illicit drug production (1) Improper loading (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: Two police officers experienced headaches while investigating and collecting evidence from a methamphetamine lab in a private residence. The officers were exposed to the substances for one hour.	

Updated 12/03/03

Hazardous Substance Releases Profile for Vernon County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Vernon County:	2	0	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	1.0	0.0	0.5
Type(s) of Substance(s) Released: Acid Hydrochloric Acid Iodine (2 events) Methamphetamine Chemicals Phosphorus Solvent			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (2)	Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (4)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	2
Interesting Events: Four police officers experienced respiratory irritation resulting from two separate events involving the investigation and collection of methamphetamine chemicals from labs found in private residences. The officers were exposed to the substances for one to two hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Warren County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Warren County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Battery Acid Hydrochloric Acid			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error (2)	Improper loading (1) Vehicle/vessel rollover (1)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (1)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0

Interesting Events: A police officer experienced respiratory irritation after coming into contact with battery acid. The acid was released from a vehicle that had been involved in a motor vehicle accident and splashed on the officer as the vehicle was being uprighted by the towing company.

Updated 12/03/03

Hazardous Substance Releases Profile for Washington County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Washington County:	1	0	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.5	0.0	0.3
Type(s) of Substance(s) Released: Acid Alcohol Iodine Phosphorus			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act	Illicit drug production

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (2)	Respiratory irritation
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	1
Interesting Events: Two police officers experienced respiratory irritation while executing a search warrant for and collecting evidence from a methamphetamine lab in a private residence. The officers were exposed to the chemicals for two hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Wayne County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Wayne County:	0	1	1
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	0.5	0.3
Type(s) of Substance(s) Released: Chlorpyrifos			

Primary Contributing Factors:	Secondary Contributing Factors:
Human error	Vehicle or vessel collision

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
General Public (2)	Trauma-Not chemical related
Injury Outcomes:	Death on scene/on arrival at hospital (1) Treated at hospital, not admitted (1)
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	0
Interesting Events: Four gallons of chlorpyrifos (Dursban insecticide) was released after a motor vehicle accident. Two members of the general public were involved in the accident; one was pronounced dead at the scene from injuries related to the accident.	

Updated 12/03/03

Hazardous Substance Releases Profile for Webster County, 2002

	Fixed Facility	Transportation	Total
No. of Events in Webster County:	0	2	2
No. of Events Statewide:	201	193	394
Percentage of State Totals:	0.0	1.0	0.5
Type(s) of Substance(s) Released: Acetone Ammonia Ethyl Ether (2 events) Sodium Hydroxide			

Primary Contributing Factors:	Secondary Contributing Factors:
Intentional or illegal act (2)	Illicit drug production (2)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Police Officer (4)	Headache
Injury Outcomes:	Injuries reported by official, outcome not known
Number of Events with Evacuations:	0
Total Number of People Evacuated:	0
Number of Methamphetamine-Related Events:	2
Interesting Events: Two police officers experienced headaches during two separate events involving methamphetamine production. One involved a meth lab in a private residence, while the other event involved a meth lab discovered in a vehicle during a routine traffic stop. The officers were exposed to the substances for three hours.	

Updated 12/03/03

Hazardous Substance Releases Profile for Missouri , 2002

	Fixed Facility	Transportation	Total
No. of Events in Missouri :	201	193	394
No. of Events Statewide:	201	193	394
Percentage of State Totals:			
Type(s) of Substance(s) Released: 2-(Thiocyanomethylthio)benzothiazole (1) 2-Butoxyethanol (1) 3-Aminopropyltrimethoxysilane (1) 4-(N-Ethyl-N-2-methanesulfonylaminoethyl) (1) Acetone (12) Acetylene (2) Acid (8) Adhesive (6) Alcohol (2) Amine (2) Ammonia (77) Ammonium Hydroxide (1) Ammonium Nitrate (3) Argon (2) Battery Acid (5) Benzoyl Peroxide (1) Bromine (1) Carbon Monoxide (7) Caustic (1) Chlorine (5) Chloroform (3) Chlorpyrifos (1) Chromic Acid (1) Coating Solution (2) Corrosive (7) Creosote (2) Cumene Hydroperoxide (1) Cypermethrin (1) Diesel Fuel (1) Diethyl ketone (1) Dipotassium Phosphate (1) DOT 2920: Corrosive Liquid, Flammable, N.O.S. (1) Dye (1) Ephedrine (2) Epoxy (1) Etchall (1) Ethanol (4) Ether (1) Ethyl Ether (23) Ethylene Dichloride (2) Ethylene Glycol (3) Ethyleneamine (1) Fertilizer (5) Flammable Liquid (1)			

Fluorosilicic Acid (2)
Foaminator (1)
Formaldehyde (3)
Freon (1)
Glyphosate (2)
Herbicide (1)
Hexamethylenetetramine (1)
HTH Pool Cleaner (1)
Hydrochloric Acid (36)
Hydrogen (1)
Hydrogen Peroxide (1)
Hydrogen Sulfide (1)
Hypochlorite (2)
Ink (2)
Iodine (11)
Isobutane (1)
Isopropanol (4)
Lead (3)
Lead Sulfide (1)
Lithium (3)
Lye (2)
Magestral Acetate (1)
Malathion (1)
Mercury (15)
Methamphetamine Chemicals (16)
Methanol (2)
Methylene Chloride (3)
Mixtures (25)
Nitric Acid (1)
Nitrogen (1)
Nitrogen Fertilizer (1)
NPK Fertilizer (1)
Oxygen (2)
Paint (17)
Pentachlorophenol (2)
Peracetic Acid (1)
Permethrin (1)
Pesticide (3)
Phosphoric Acid (9)
Phosphorus (13)
Photographic Chemical (1)
Plaster agent (1)
Polyamine (1)
Polychlorinated Biphenyls (4)
Polycyclic Aromatic Hydrocarbons (1)
Polymer (1)
Potash (1)
Potassium Flurotitanate (1)
Potassium Hydroxide (6)
Prodiamine (1)
Propynyl butylcarbonate (1)
Radioactive Material (1)
Resin Solution (6)
Sealant (1)

Sodium Chloride (1)
 Sodium Cyanide (1)
 Sodium Fluoride (2)
 Sodium Hydroxide (14)
 Sodium Hypochlorite (1)
 Sodium Metasilicate (1)
 Sodium Silicate (1)
 Solvent (17)
 Styrene (1)
 Sulfuric Acid (16)
 Tert-nonyl mercaptan (1)
 Tetrachloroethylene (2)
 Toluene (6)
 Trichloroethylene (1)
 Trifluralin (1)
 Trisodium Phosphate (1)
 Vinyl Toluene (1)
 Xylene (2)
 Zinc Sulfate (2)

Primary Contributing Factors:	Secondary Contributing Factors:
Bad weather conditions (6) Equipment failure (83) Factors beyond human control (1) Human error (176) Intentional or illegal act (90) Performing maintenance (1) Unknown (37)	Broken container (1) Broken thermometer (7) Broken valve (1) Clogged sewer (1) Equipment failure (2) Explosion (1) Fire (11) Forklift puncture (29) Gasket missing (1) Heavy rain (1) High winds (1) Hit by vehicle (1) Human error (2) Illicit drug production (86) Improper loading (65) Improper mixing (1) Inadequate ventilation (2) Leaking dome lid (1) Lid popped open (1) Load shift (1) Loose caps (7) Loose fitting (1) Loose lid (1) Loose valve (4) Motor overturned (1) Nail puncture (2) Open valve (1) Performing maintenance (3) Power failure/electrical problems (1) Puncture (3) Ruptured seam (1) System/process upset (6)

Tire blew out (1)
 Unauthorized/improper dumping (5)
 Unknown (11)
 Vehicle or vessel collision (11)
 Vehicle/vessel rollover (20)

Number of Victims by Type:	Types of Adverse Health Effects Sustained:
Employee (68) General Public (109) Police Officer (103) Professional Firefighter (12) Student (13) Unknown (2)	Burns-Chemical related Burns-Not chemical related Carbon monoxide poisoning Dizziness/CNS symptoms Eye irritation Gastrointestinal problems Headache Neck ache Respiratory irritation Shortness of breath Skin irritation Trauma-Chemical related Trauma-Not chemical related
Injury Outcomes:	Death after arrival at hospital (1) Death on scene/on arrival at hospital (4) Injuries reported by official, outcome not known (105) Observation at hospital; no treatment (1) Seen by private physician within 24 hours (6) Treated at hospital, admitted (21) Treated at hospital, not admitted (121) Treated on scene (18)
Number of Events with Evacuations:	32
Total Number of People Evacuated:	2,165
Number of Methamphetamine-Related Events:	85

Interesting Events: Two garbage workers emptied a dumpster at an office supply store. Upon reaching their next stop, they noticed fumes coming off of the truck. Thinking the truck was on fire, they inspected the load they were carrying and noticed 50-60 gallons of a greenish substance in the back of the truck. The employee also began experiencing eye and skin irritation. Fire department personnel responded and the truck was taken back to the transfer station. It was determined that paint and an HTH pool cleaner had been improperly disposed of in the dumpster, and the two chemicals reacted causing the release of a chlorine gas. The employees were transported to a hospital for treatment.

Four employees and 63 members of the general public experienced respiratory irritation after 16,900 pounds of chlorine was released at a chemical repackaging facility. A rail tank car was unloading the chlorine when the flex hose ruptured. An automatic shut-off valve on the car failed to work, and an emergency shut-off system at the plant also failed to work. 400 employees and private citizens were evacuated from the area for almost eight hours.

The driver of a truck hauling tanks of ammonia attempted to slow down for a vehicle stopping in front of him, and the towed tanks swerved into the path of another tractor trailer. The tractor trailer hit one of the tanks, causing it to rupture and leak the ammonia. The drivers of the vehicles were not injured in the accident; however, nine individuals who were at a nearby Wal-Mart reported to the emergency

room within 25 minutes after the accident complaining of respiratory irritation. Traffic was diverted from the area for approximately one hour.

A truck pulling a nurse tank came to an agricultural facility to fill up with anhydrous ammonia. After hooking up to the supply tank, the truck suddenly rolled forward and broke the valve, causing anhydrous to leak from the broken connection. The material was released quickly and exploded, according to reports. It was not known if the driver failed to put the truck into gear or if the truck slipped out of gear. Two employees experienced respiratory irritation; both were released from the hospital within 24 hours. The third victim was a customer of the business who was standing downwind from the tank and inhaled some of the ammonia, and was transported to a hospital in serious condition. Six employees and customers at the facility were immediately evacuated. A high school is located approximately one mile north of the plant. There were several students and teachers remaining at the school, in addition to individuals who were setting up for a meeting at the high school later that evening. It was estimated that 45 students and 25 teachers were evacuated.

Failure of a boiler motor caused carbon monoxide to be released near a hotel, and high winds caused it to enter the ventilation system. The fire department initially responded after two children became ill. When the physician at the hospital suspected carbon monoxide poisoning, a HazMat team was dispatched. The occupants and employees of the hotel were evacuated and the hotel remained closed until the wing could be ventilated and CO2 levels were again in the acceptable range. A total of 11 people experienced carbon monoxide poisoning.

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